

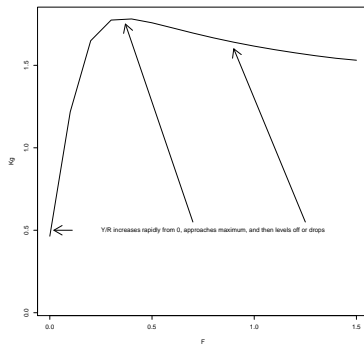
# Yield per recruit case studies

fish5105yieldrec Yield per recruit analysis

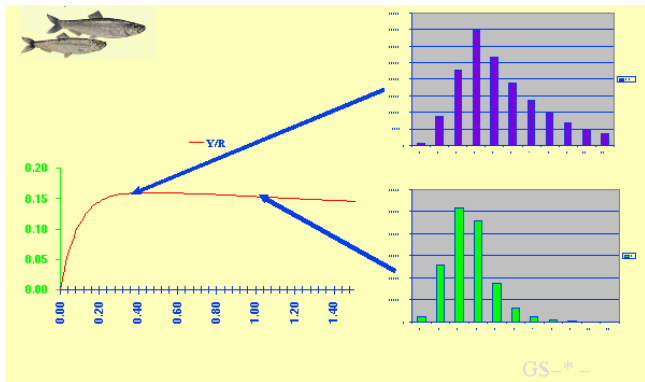
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December 19, 2016

## I-cod Yield per recruit



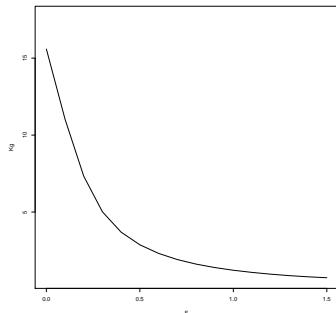
## Herring, I-SuSp, Yield-Recr



# l-cod SSB per recruit

## Replacement

- $S/R$ =replacement to SSB
- How much does a year-class provide into the SSB?
- $S = R * (S/R)|_F$
- If a year-class gives less replacement than was needed for its production...



# Yield per recruit: Assumptions

- General: Equilibrium
  - Mean weight fixed
  - Selection pattern fixed
- No equilibrium exists -> gives a direction
  - Mean weights are variable
  - depend on environment/stock size
- Need to get the number of recruits separately
  - Fixed?
  - Related to stock size?
  - Function of other variables

## Yield per recruit: Virtues

- Gives reasonable utilization with minimum work.
- Appears to work as a harvest control rule if use  $F = F_{0.1}$ .
- Can compare current  $F$  with plausible targets.

# Yield per recruit: Problems

- Stock-recruitment relationship missing
- Often uninformative (flat curve)
- Assumptions may be too stiff